

**AMENDMENTS TO THE DRAWINGS**

The attached sheet of drawings includes changes to FIG. 1. This sheet, which includes FIGS. 1 and 2, replaces the original sheet including FIGS. 1 and 2.

Attachment: Replacement Sheet

**REMARKS**

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Claims 13-20 and 22-27 are pending in this application. By this Amendment, claims 13, 25, 26, and 27 are amended. No new matter is added. Claims 13, 25, 26, and 27 are the independent claims.

**Request for Acknowledgements**

Applicant respectfully notes that the present action does not indicate that the claim to foreign priority under 35 U.S.C. §119 has been acknowledged or that certified copies of all priority documents have been received by the U.S.P.T.O. Applicant respectfully requests that the Examiner's next communication include an indication as to the claim to foreign priority under 35 U.S.C. §119 and an acknowledgement of receipt of the certified copies of all priority documents.

Applicant also respectfully notes that the present action does not indicate that the drawings have been accepted by the Examiner. Applicant respectfully requests that the Examiner's next communication include an indication as to the acceptability of the filed drawings or as to any perceived deficiencies so that the Applicant may have a full and fair opportunity to submit appropriate amendments and/or corrections to the drawings.

**Applicant Initiated Interview Summary**

The courtesies extended by Examiner Hayes and Primary Examiner Swiatek to Applicant's representative, ***David J. Cho, Reg. No. 48,078***, during a telephonic interview conducted on May 27, 2010, are acknowledged and appreciated. The

substance of the interview is set forth in the Examiner's Interview Summary and in the following Applicant Initiated Interview Summary. As required by 37 C.F.R. § 1.133(b), Applicant's summary of that interview is as follows:

1. Brief Description of any Exhibit Shown

No exhibit was shown or demonstrated during the interview.

2. Identification of the Claims Discussed

The Examiner and Applicant's representative discussed independent claims 13 and 25-27.

3. Identification of the Specific Prior Art Discussed

The Examiner and Applicant's representative discussed U.S. Patent No. 2007/0215053 to Duke ("the Duke reference") and WO 98/28969 to Oosterling ("the Oosterling reference").

4. Identification of the Proposed Amendments

A proposed amendment was proposed during the interview.

5. Summary of the Arguments Presented to the Examiner

Applicant's representative presented arguments regarding the failure of the Duke reference to disclose the subject matter of independent claim 13. More specifically, Applicant's representative argued that the vacuum measuring device (e.g., pressure sensor) of Duke in the "space" region at the top of the teat cup liner cannot perform the same function as claim 13 (i.e., "measuring the pressure in both the space at the top end and the lower end of the teat cup liner"). In other words, the Duke reference discloses the injection nozzle 13 (inlet) being integral with a tube fluid line 14 for delivering fluid (see paragraph **[0039]** of Duke). Hence, the injection nozzle is not be connected to a "vacuum" source. The Examiners agreed with Applicant's

representative, and suggested that claim 13 be amended to include the term "vacuum" source to patentably distinguish over the Duke reference.

Similarly, in regard to the Oosterling reference (WO 98/28969), Applicant's representative argued that the Oosterling reference fails to disclose or suggest, "the teat cup liner further includes an inlet to said space connected to a vacuum source." Specifically, the supply line 4 of Oosterling is used for supplying a dosing mean of rinsing fluid or alternatively embodied as an airsupply for supplying air during milking. The Examiners agreed, and stated that the current rejection based on the Oosterling reference would be overcome.

In regard to claims 25-27, an agreement was reached to amend claims 25-27 similarly to claim 13. For instance, amended claims 25-27 include additional features that "the space is connected to a vacuum source" and "the vacuum is measured in the space and the lower end of the teat cup liner."

#### 6. General Indication of Other Pertinent Matters Discussed

Applicant's representative and the Examiners discussed the rejections under §112, first and second paragraphs. An agreement was reached to amend claim 13 to recite that the "milking machine" adjusts the vacuum in the space during milking according to at least the measured vacuum difference, would overcome the §112 rejections.

In regard to the drawing objection, an agreement was reached to revise FIG. 1 to include the "vacuum difference measuring device."

#### 7. General Outcome of the Interview

The Examiner and Applicant's representative generally agreed on the nature of the subject matter recited in independent claims 13 and 25-27. In addition, an

agreement was reached regarding the rejection under §112, first and second paragraphs and the drawing objection.

**Drawing Objection**

The drawings are objected to under 37 CFR 1.83(a). Specifically, the “vacuum difference measuring device” must be shown or the feature canceled from the claims.

As agreed by the Examiner during the interview, Applicant has revised FIG. 1 to include the “vacuum difference measuring device” as shown in the attached Replacement Sheet. Reconsideration and withdrawal of the objection to the drawing are respectfully requested.

**Claim Rejections - 35 U.S.C. § 112**

***I. First Paragraph***

Claims 13-20 and 22-24 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicant respectfully traverses this rejection for the reasons discussed below.

As agreed by the Examiner during the interview, Applicant has amended claim 13 to recite that the “milking machine” adjusts the vacuum in the space during milking according to at least the measured vacuum difference.

Reconsideration and withdrawal of the objection to the drawing are respectfully requested.

***II. Second Paragraph***

Claims 13-20 and 22-24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. Applicant respectfully traverses this rejection for the reasons discussed below.

As similarly discussed above regarding the §112, first paragraph, claim 13 has been amended to recite that the "milking machine" adjusts the vacuum.

In regard to the term "vacuum level," Applicant has amended claim 13 to obviate the rejection.

Reconsideration and withdrawal of the objection to the drawing are respectfully requested.

#### **Claim Rejections - 35 U.S.C. § 102**

Claims 13, 15, 18, 20, 22, 25, and 27 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Publication No. 2007/0215053 to Duke ("the Duke reference"). Applicant respectfully traverses this rejection for the reasons discussed below.

As discussed and agreed by the Examiner during the interview, Applicant respectfully submits that the Duke reference fails to disclose, or even suggest *inter alia*, "said teat cup liner further includes an inlet to said space connected to a vacuum source," as recited in amended claim 13.

In the outstanding Office Action, the Examiner allegedly asserts that the injection nozzle 13 (inlet) of Duke is connected to a source 14.<sup>1</sup> However, Applicant submits that the injection nozzle 13 (inlet) is integral with a tube fluid line 14 for delivering fluid (*see paragraph [0039] of Duke*). Hence, the injection nozzle is not connected to a "vacuum" source.

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<sup>1</sup> See outstanding Office Action mailed January 21, 2010, page 4, paragraph 11.

Moreover, because the Duke reference fails to disclose or suggest a “***vacuum source***,” it cannot teach or suggest, “measuring a vacuum difference between the lower end of said teat cup liner and said space, and controlling the vacuum in response to the vacuum difference” as recited in claim 13. Therefore, contrary to the Examiner’s contention, the Hsu reference does not disclose or suggest each and every element of claim 13.

Since the Duke reference fails to disclose each and every element of claim 13, it cannot provide a basis for a rejection under 35 U.S.C. §102(e) and, thus, is allowable. Claims 15, 18, 20 and 22, depend from amended claim 13 and, therefore, allowable for the similar reasons discussed above with respect to claim 13.

In regard to claims 25 and 27, it is submitted that claims 25 and 27 have been amended to recite similar subject matter as allowable claim 13. For instance, claims 25 and 27 recite, *inter alia*, “the space is connected to a vacuum source” and “the vacuum is measured in the space and the lower end of the teat cup liner.” Since claims 25 and 27 recite similar allowable subject matter as claim 13, Applicant respectfully submits that claims 25 and 27 are allowable for the reasons as discussed above regarding claim 13.

For at least these reasons, the Examiner is respectfully requested to reconsider and withdraw the §102(e) rejection of claims 13, 15, 18, 20, 22, 25, and 27.

#### **Claim Rejections - 35 U.S.C. § 103**

Claims 13, 14, and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 98/28969 to Oosterling (“the Oosterling reference”) in view of WO/0045630 to Ahrweiler (“the Ahrweiler reference”). Applicant respectfully traverses this rejection for the reasons discussed below.

As similarly discussed above, Applicant respectfully submits that the Oosterling and Ahrweiler references, individually or in combination, fail to disclose or suggest, *inter alia* “said teat cup liner further includes an inlet to said space connected to a vacuum source,” as recited in amended claim 13.

Specifically, the Oosterling reference discloses a supply line 4 used for supplying a dosing mean of **rinsing fluid** or alternatively embodied as an airsupply for **supplying air** during milking. *See page 16, lines 12-16 and FIG. 2a.* In other words, the supply line 4 is not connected to a vacuum source.

Accordingly, Applicant respectfully submits that the Oosterling reference fails to disclose or suggest “said teat cup liner further includes an inlet to said space connected to a vacuum source,” as recited in claim 13:

In regard to the Ahrweiler reference, this reference is merely used to teach the “vacuum difference measuring device,” and fails to teach or suggest the “vacuum source.”

Moreover, Applicant submits that the Ahrweiler reference fails to disclose the “vacuum difference measuring device” as taught by claim 13. Specifically, the Ahrweiler reference only discloses a plurality of sensors M1-M11 for measuring pressures such that the pressure valves are correlated to one another to allow pressure differences to be determined. Accordingly, the sensors M10 and M1 cannot be used to obtain a pressure difference. Accordingly, Applicant submits that the Ahrweiler reference does not disclose “a vacuum difference measuring device, provided to measure a vacuum difference between the lower end of said teat cup liner and said space,” as recited in amended claim 13.

Since the rejection fails to disclose or suggest each and every element of the rejected claims, Applicant respectfully submits that no *prima facie* case of obviousness has been established with respect to claim 13.

In view of the above, Applicant respectfully submits that the Oosterling and Ahrweiler references, individually or in combination, fail to disclose or suggest each and every element of claim 13, and therefore, claim 13 is allowable over the cited prior art. Claims 14 and 24 are dependent from claim 13, and therefore, also allowable.

Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 16, 23, and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2007/0215053 to Duke in view of WO 01/19169 to Bosma ("the Bosma reference"). Applicant respectfully traverses this rejection for the reasons discussed below.

Claims 16 and 23 are believed to be allowable for at least the reasons set forth above regarding claim 13. The Bosma reference fails to provide the teachings noted above as missing from the Duke reference. Since claims 16 and 23 are patentable at least by virtue of their dependency on claim 13, Applicant respectfully requests that the rejection of claims 16 and 23 under 35 U.S.C. § 103(a) be withdrawn.

In regard to claim 26, it is submitted that claim 26 has been amended to recite similar subject matter as allowable claim 13. For instance, claim 26 recites, *inter alia*, "the space is connected to a vacuum source" and "the vacuum is measured in the space and the lower end of the teat cup liner." Since claim 26 recites similar subject matter as claim 13, Applicant respectfully submits that claim 26 is allowable for the reasons as discussed above regarding claim 13.

Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2007/0215053 to Duke. Applicant respectfully traverses this rejection for the reasons discussed below.

Claim 17 is believed to be allowable for at least the reasons set forth above regarding claim 13. Since claim 17 is patentable at least by virtue of its dependency on claim 13, Applicant respectfully requests that the rejection of claim 17 under 35 U.S.C. § 103(a) be withdrawn.

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2007/0215053 to Duke in view of U.S. Patent Publication No. 2005/0072362 to Innings ("the Innings reference"). Applicant respectfully traverses this rejection for the reasons discussed below.

Claim 19 is believed to be allowable for at least the reasons set forth above regarding claim 13. The Innings reference fails to provide the teachings noted above as missing from the Duke reference. Since claim 19 is patentable at least by virtue of its dependency on claim 13, Applicant respectfully requests that the rejection of claim 17 under 35 U.S.C. § 103(a) be withdrawn.

### **CONCLUSION**

In view of the above remarks and amendments, Applicant respectfully submits that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. Further, the above remarks demonstrate the failings of the outstanding rejections, and are sufficient to overcome the rejections. However, these

remarks are not intended to, nor need they, comprehensively address each and every reason for the patentability of the claimed subject matter over the applied prior art. Accordingly, Applicant does not contend that the claims are patentable solely on the basis of the particular claim elements discussed above.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned, at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,  
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By

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